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TRENDS IN LAND USE AND CROP PRODUCTION

LOWER YELLOWSTONE IRRIGATION PROJECT, MONTANA AND NORTH DAKOTA

1912-44

United States Department of Agriculture
Bureau of Agricultural Economics
Division of Land Economics
Lincoln, Nebraska
June, 1946

TRENDS IN LAND USE AND CROP PRODUCTION
LOWER YELLOWSTONE IRRIGATION PROJECT, MONTANA AND NORTH DAKOTA
1912-44 1/

This report shows trends in land use and crop production on the Lower Yellowstone Irrigation Project in Richland and Dawson counties, Montana, and McKenzie County, North Dakota, from 1912 to 1944. No analysis is made of the reasons for the various trends shown. Data for this report are from the Annual Project Histories and Annual Reports of the Bureau of Reclamation. The data are based on the crop census taken every year.

Definition of Terms

The principal terms used in this report follow as closely as possible the current reporting terminology of the Bureau of Reclamation. These terms are defined as follows:

"Irrigable acreage" is that acreage for which the Bureau of Reclamation was prepared to supply water.

"Net area in cultivation" is all irrigable land from which crops were harvested, land in soil improvement crops, fallow or fall plowed land, and land irrigated for pasture. It sometimes includes cropland that was not irrigated during that crop year.

"Cereal grains" include barley, corn, oats, rye, wheat, sorghum for grain, and speltz.

"Hay and forage crops" include alfalfa hay, clover hay, corn fodder, pasture, sorghum, mangels, ensilage and grain straw.

"Other crops" include seed, garden, truck, and fruit.

1/ This report was prepared by Earl F. Hodges and Lawrence A. Reuss. Harry A. Schmitt, formerly with the Bureau of Agricultural Economics, assisted in the compilation of the data.

The study upon which this report is based was started in 1944 and was continued under a Memorandum of Agreement between the Bureau of Agricultural Economics, United States Department of Agriculture, and the Bureau of Reclamation, United States Department of Interior, effective November 1945.

"Gross value of crops" includes the value of forage, irrigated pasture, harvested crops, government and commercial payments.

Sugar beet tops and flax straw are included with the value of "Hay and forage".

Agricultural Conservation payments other than sugar beet payments are included in the value of "Other crops".

The value of sugar beets in a given year is the initial factory payment for that year plus Agricultural Conservation and factory bonus payments received for beets grown in the previous crop year. For this reason the gross value of beets and the price per ton do not accurately reflect the returns received for the crop produced in any given year.

It should be noted that crop yield data combine irrigated and nonirrigated crop yields. Sugar beets, alfalfa and similar crops having high water requirements are usually irrigated whereas in some years small grains may be grown without irrigation.

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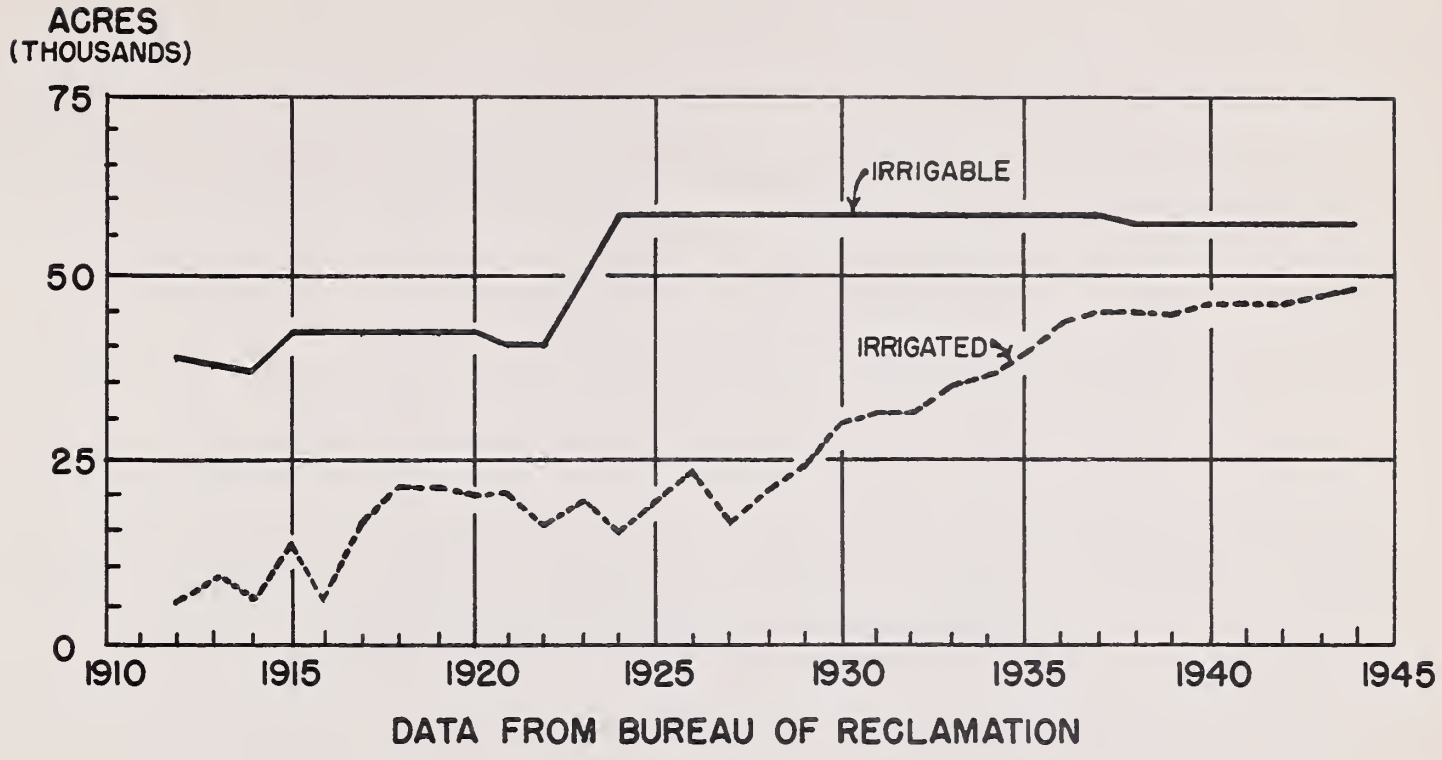
1912 - 1944



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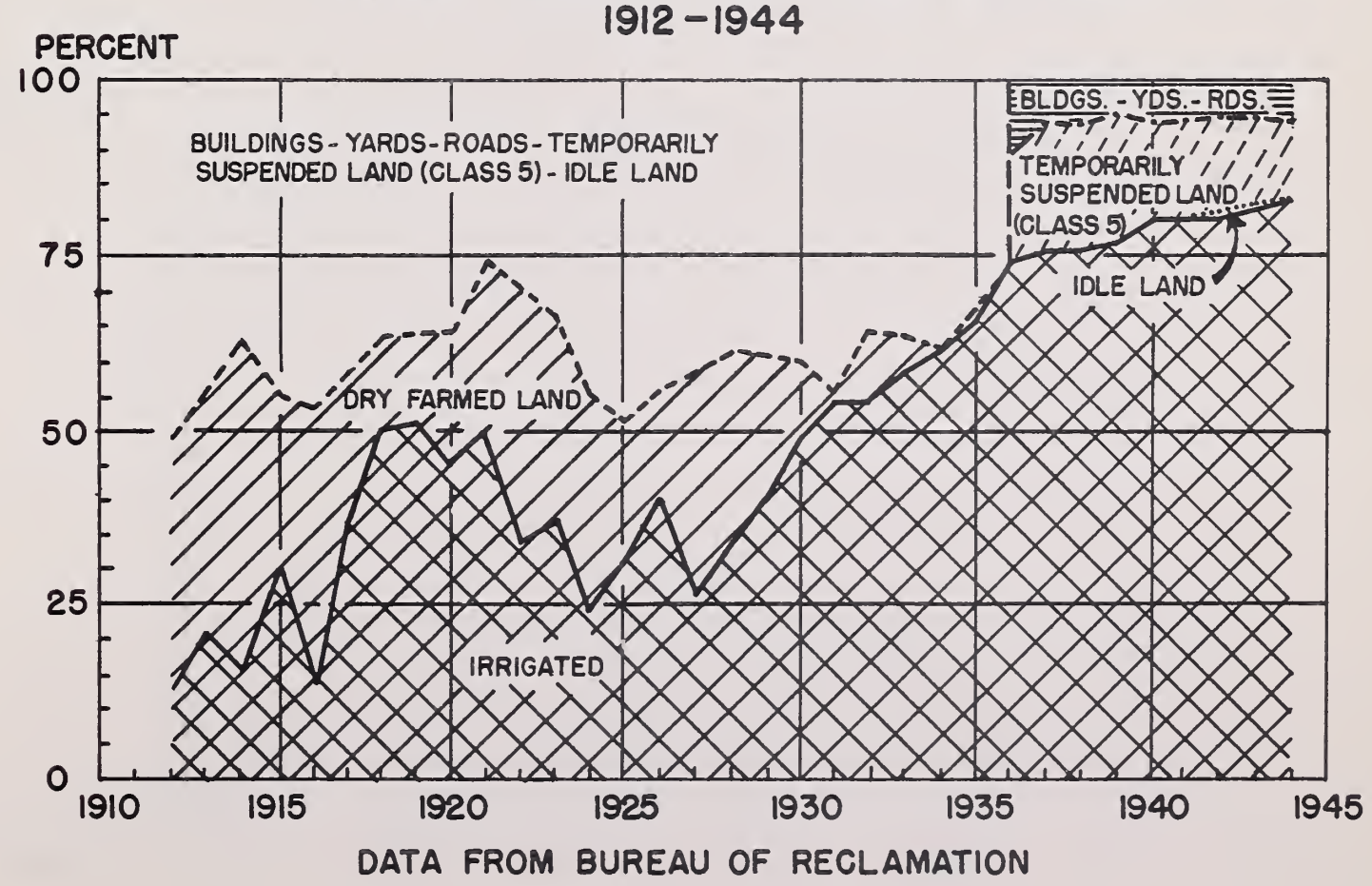

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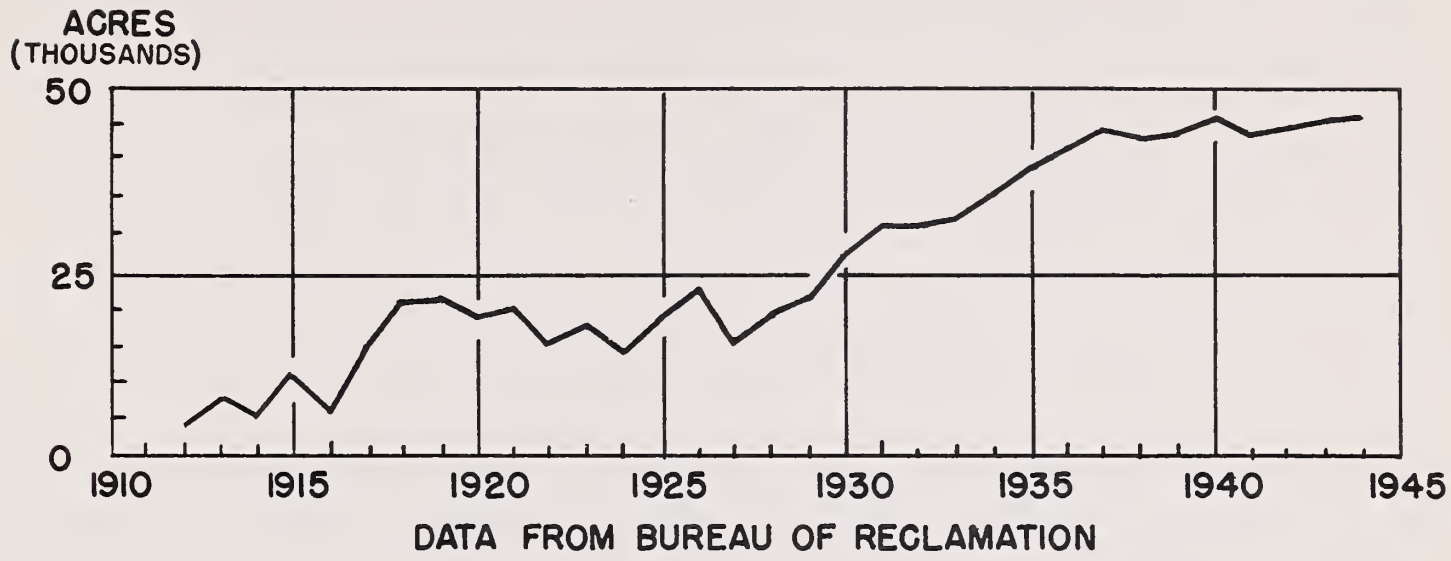

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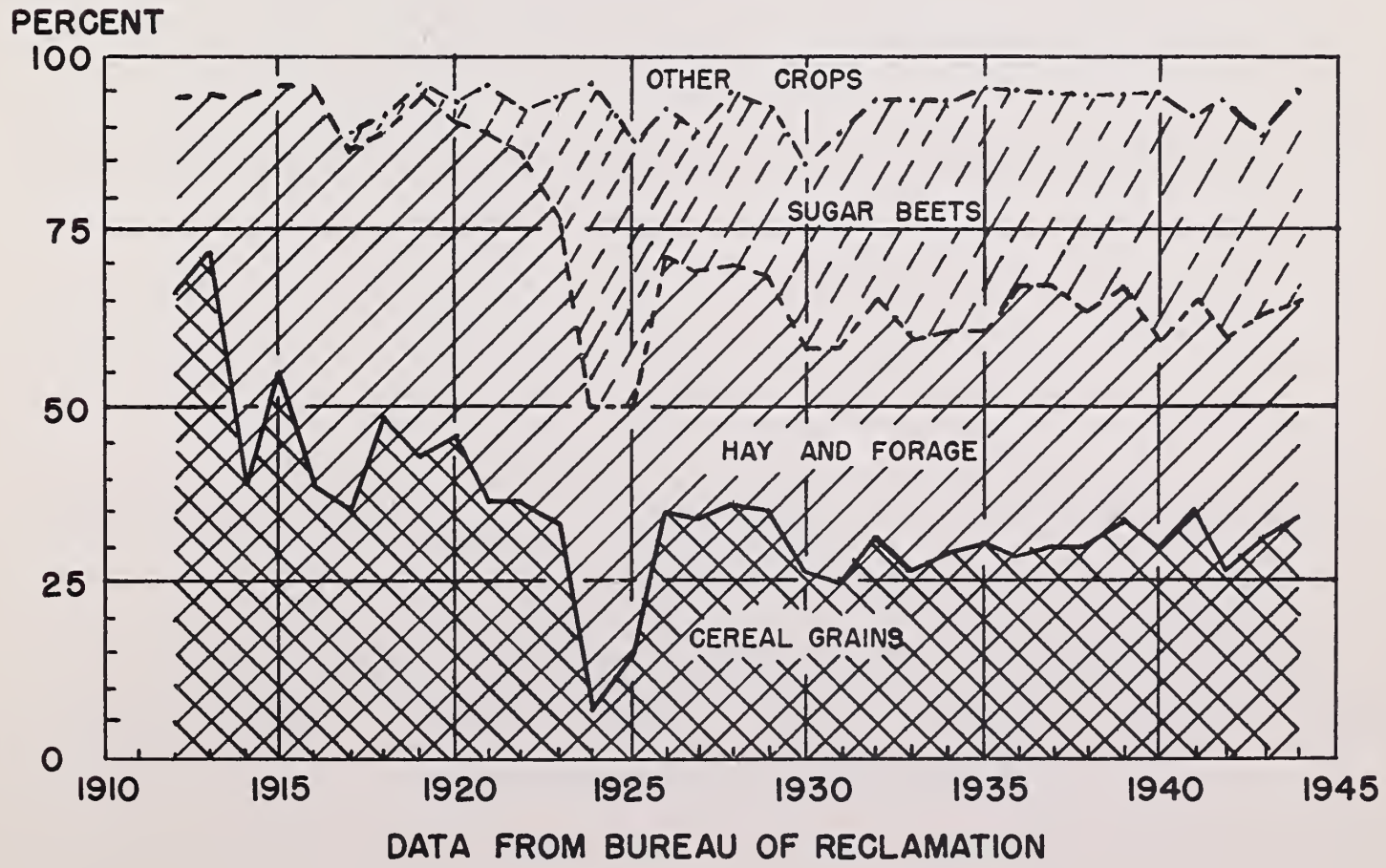

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FIGURE 5.- GROSS VALUE OF CROPS
LOWER YELLOWSTONE IRRIGATION PROJECT
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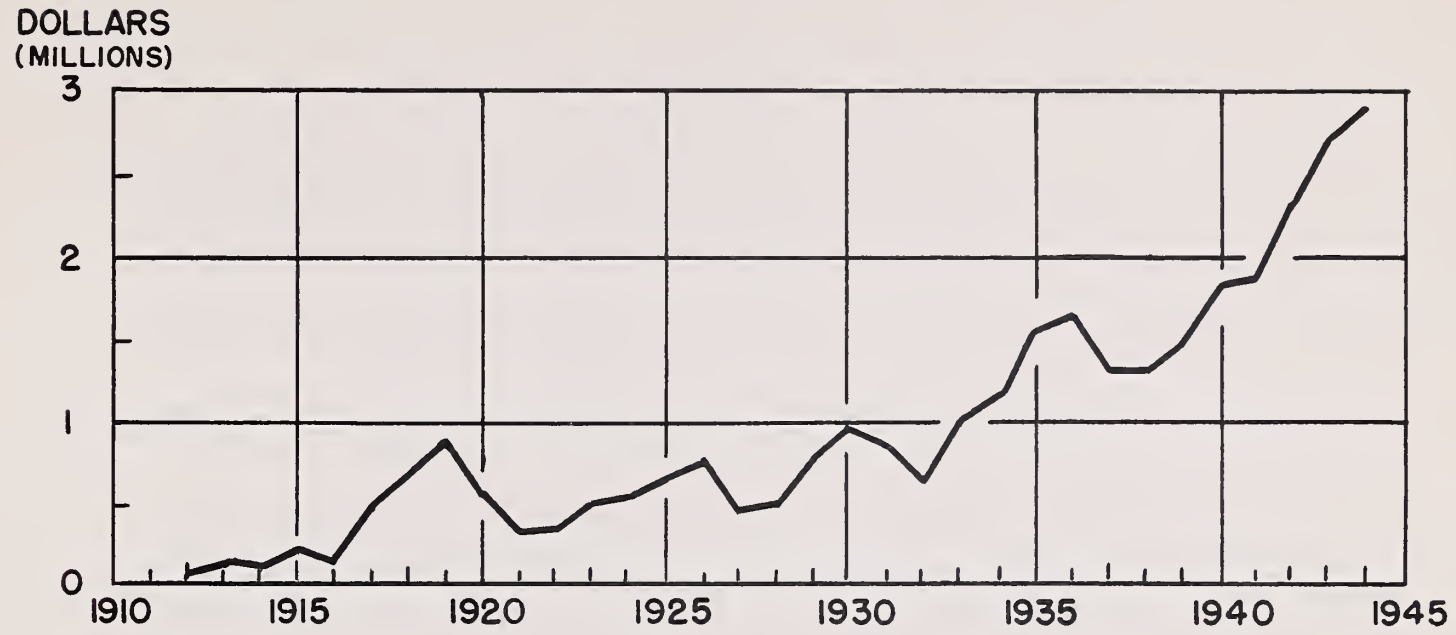

DATA FROM BUREAU OF RECLAMATION

FIGURE 6.- PERCENTAGE OF GROSS VALUE OF CROPS
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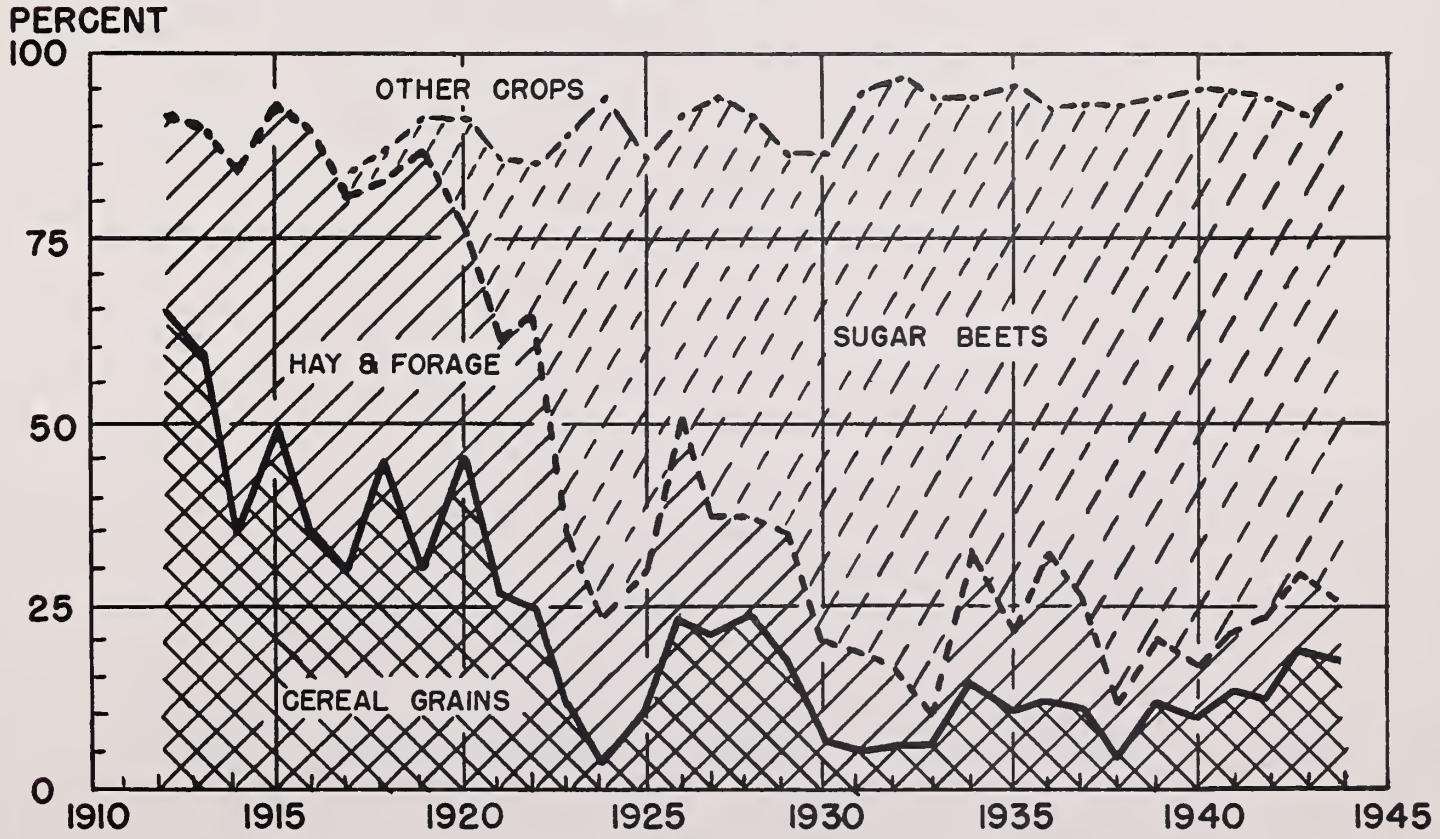

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FIGURE 7.- GROSS VALUE PER ACRE OF CEREAL GRAINS, HAY AND FORAGE AND SUGAR BEETS
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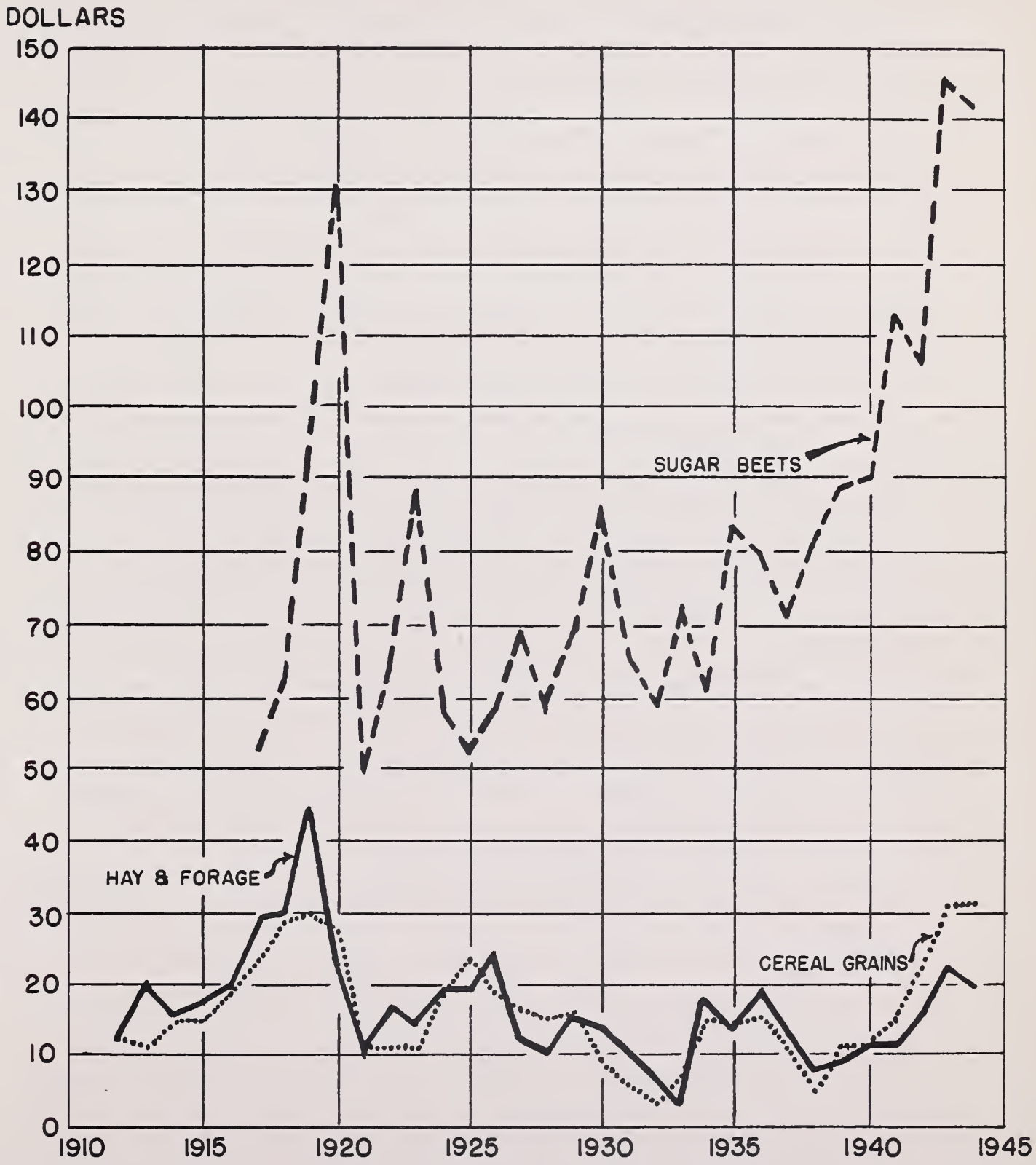

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FIGURE 8.- SUGAR BEETS: ACREAGE, YIELD AND VALUE
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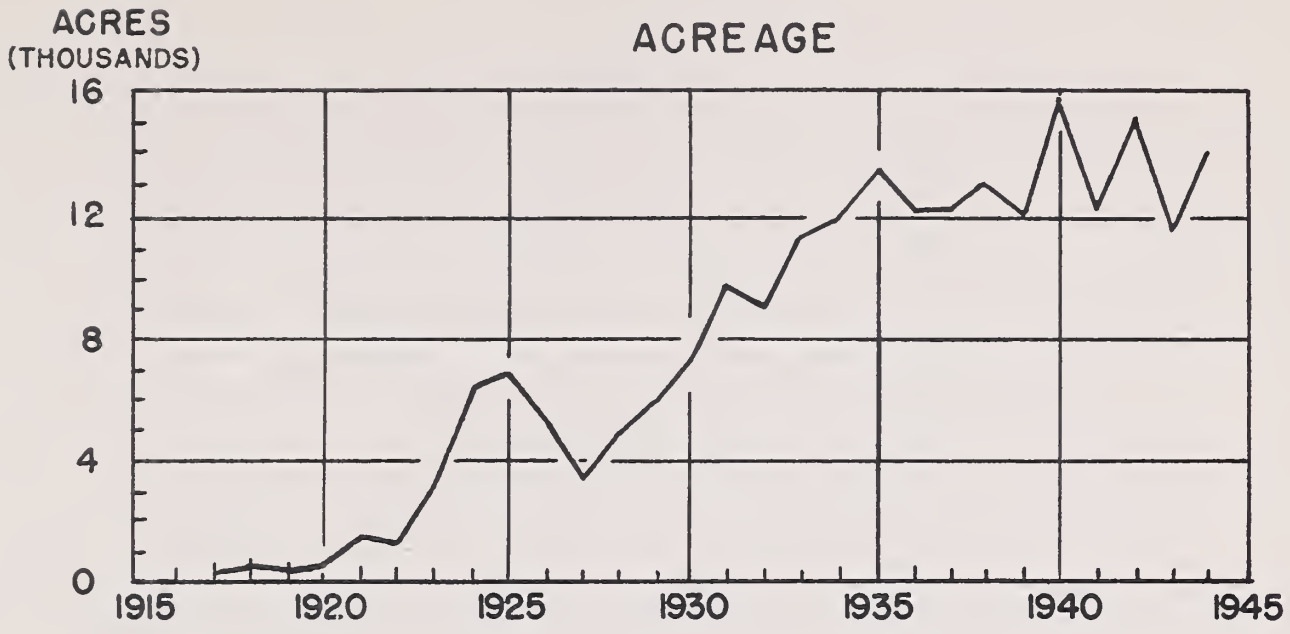

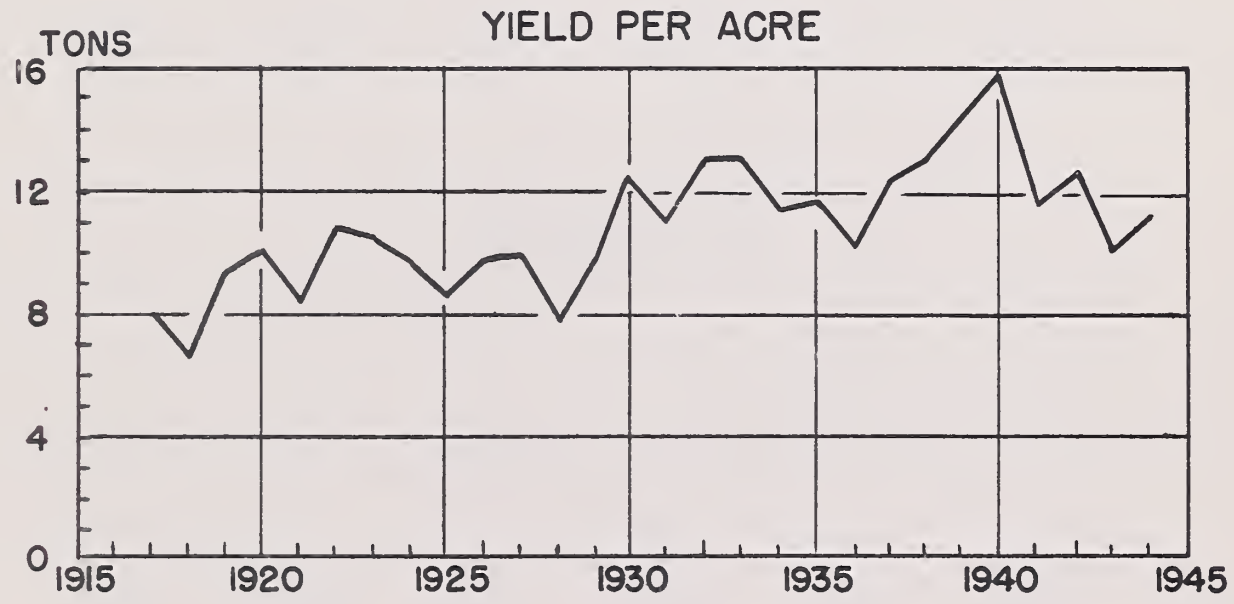

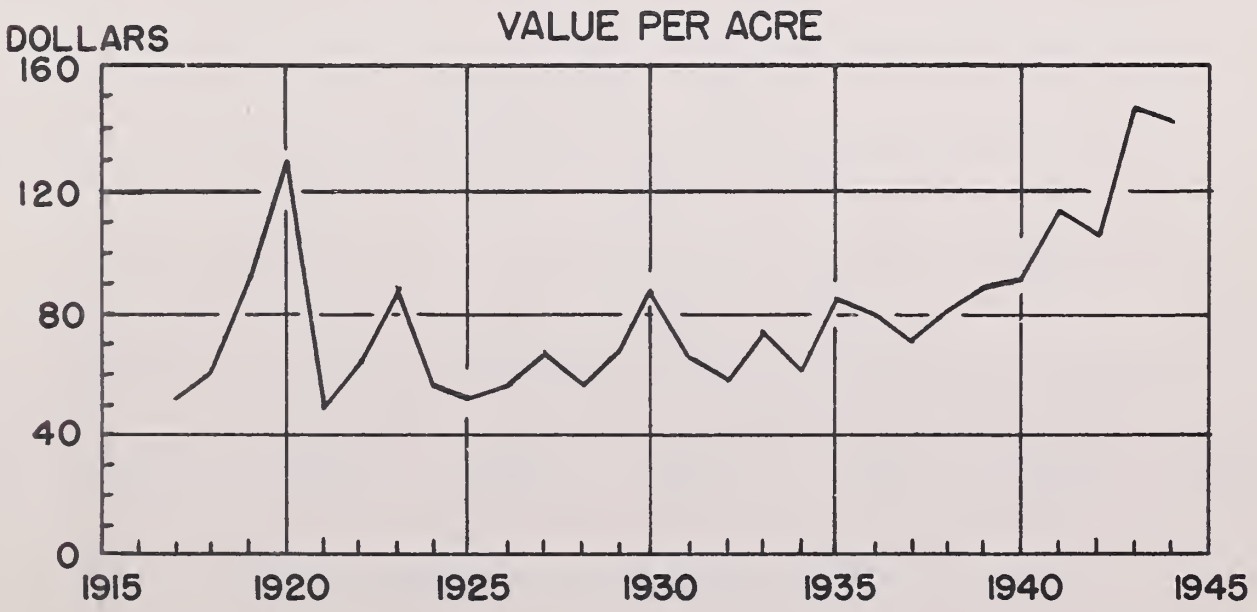

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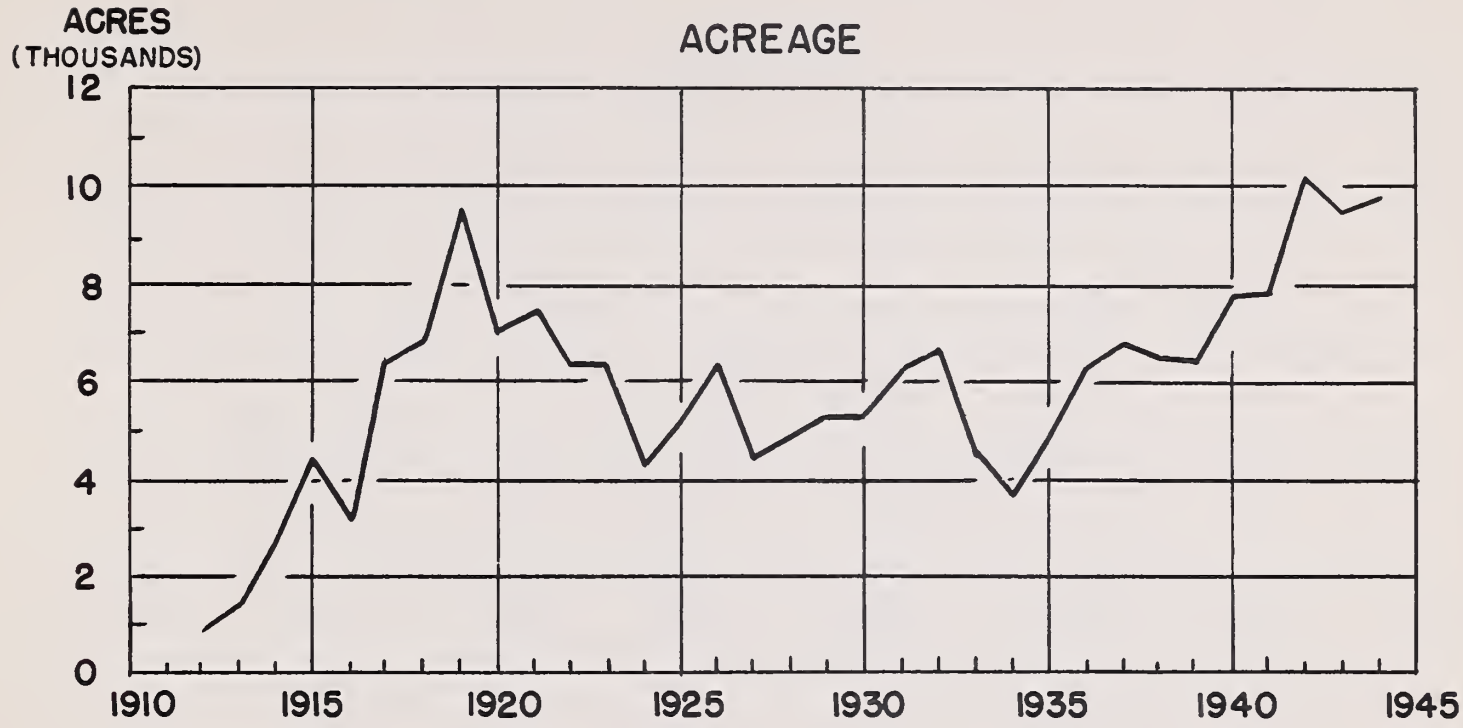
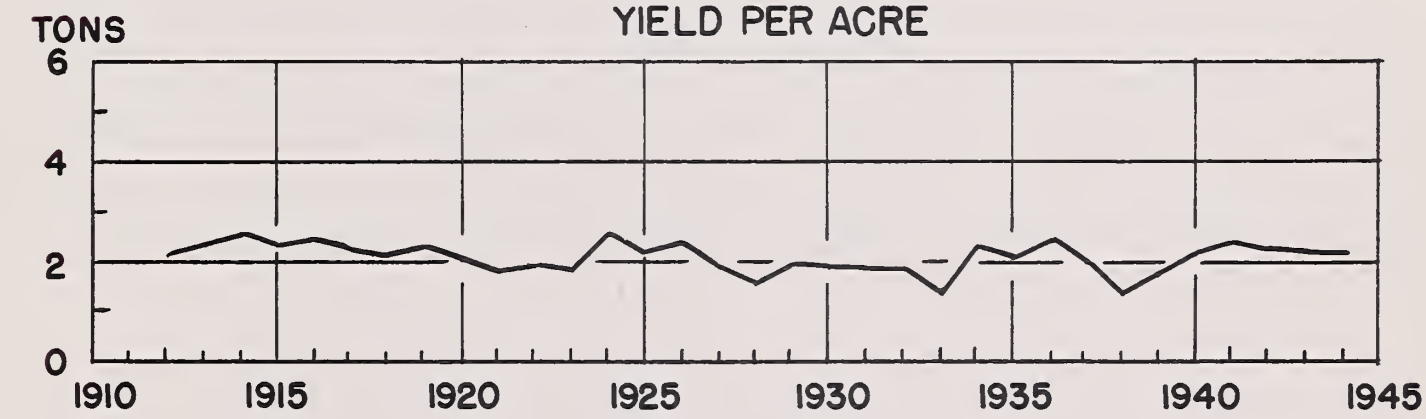
FIGURE 9.- ALFALFA HAY: ACREAGE, YIELD AND VALUE
LOWER YELLOWSTONE IRRIGATION PROJECT
1912 - 1944





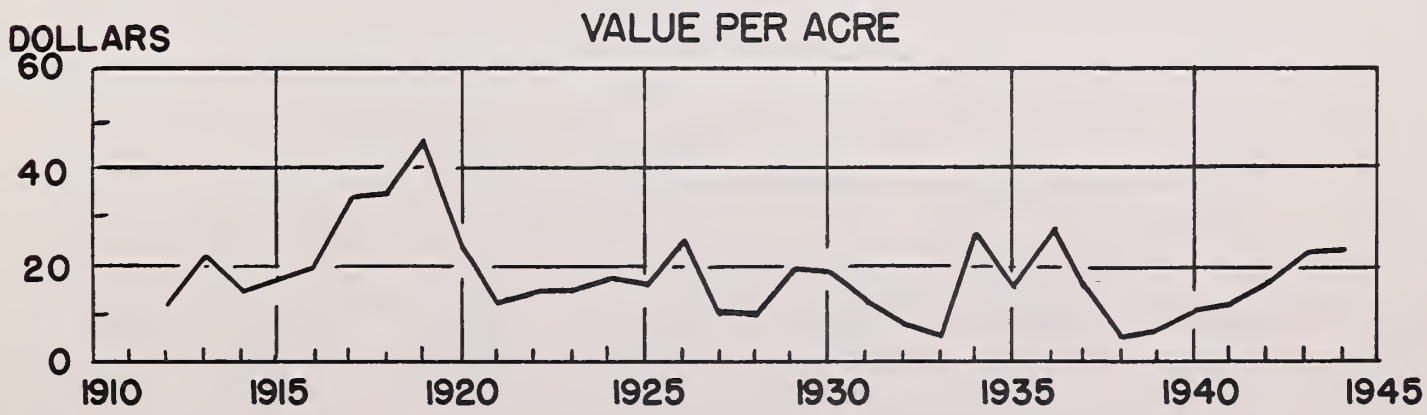


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FIGURE 10.- WHEAT: ACREAGE, YIELD AND VALUE
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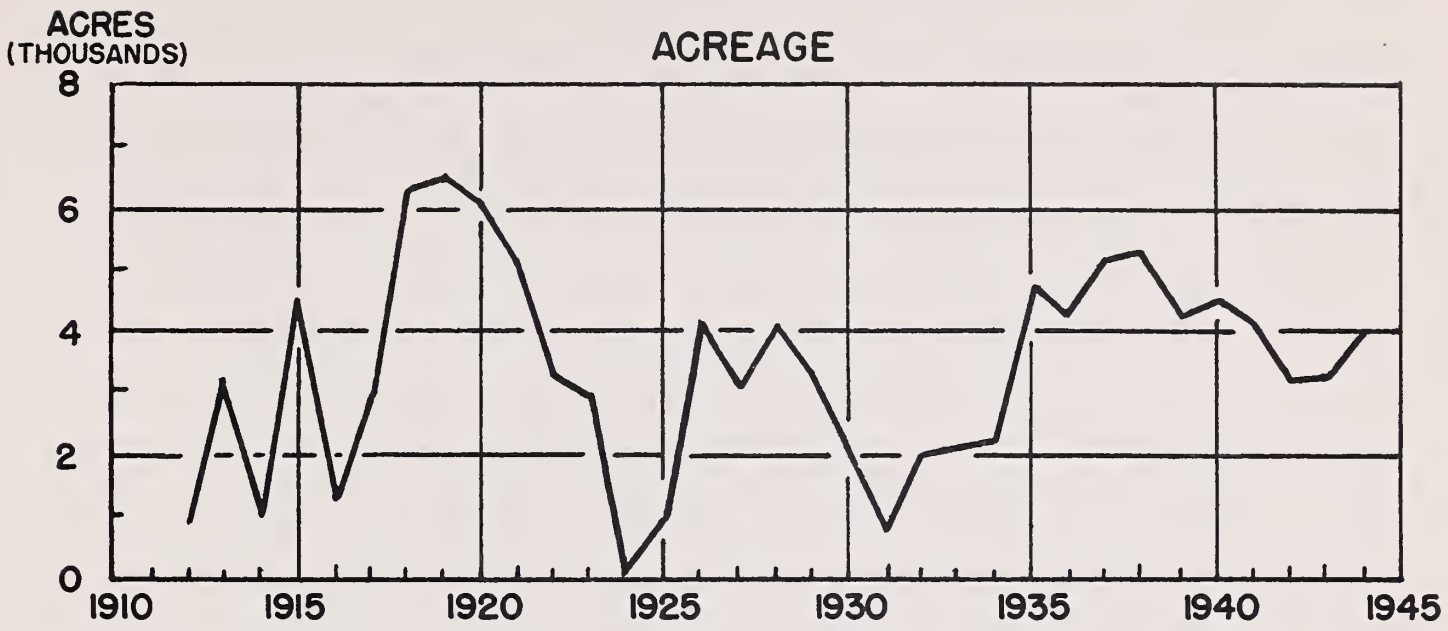

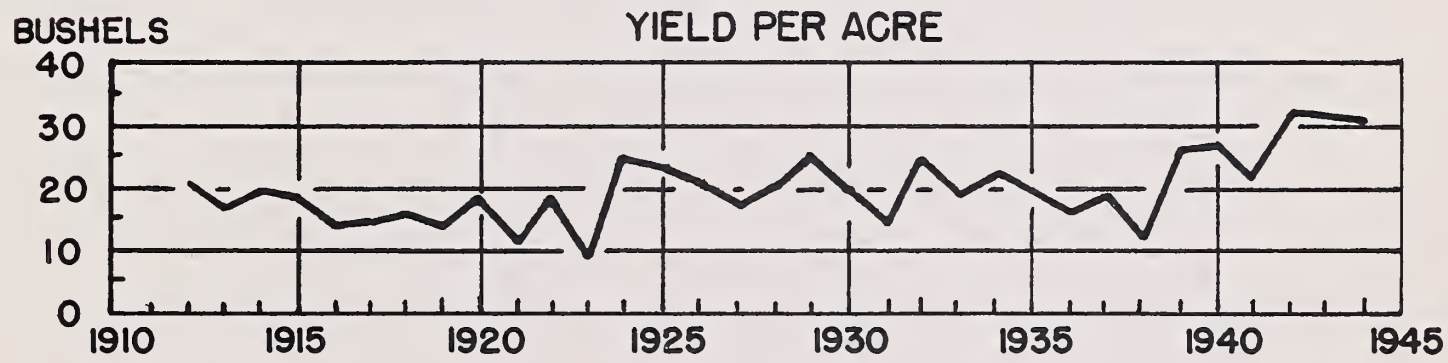

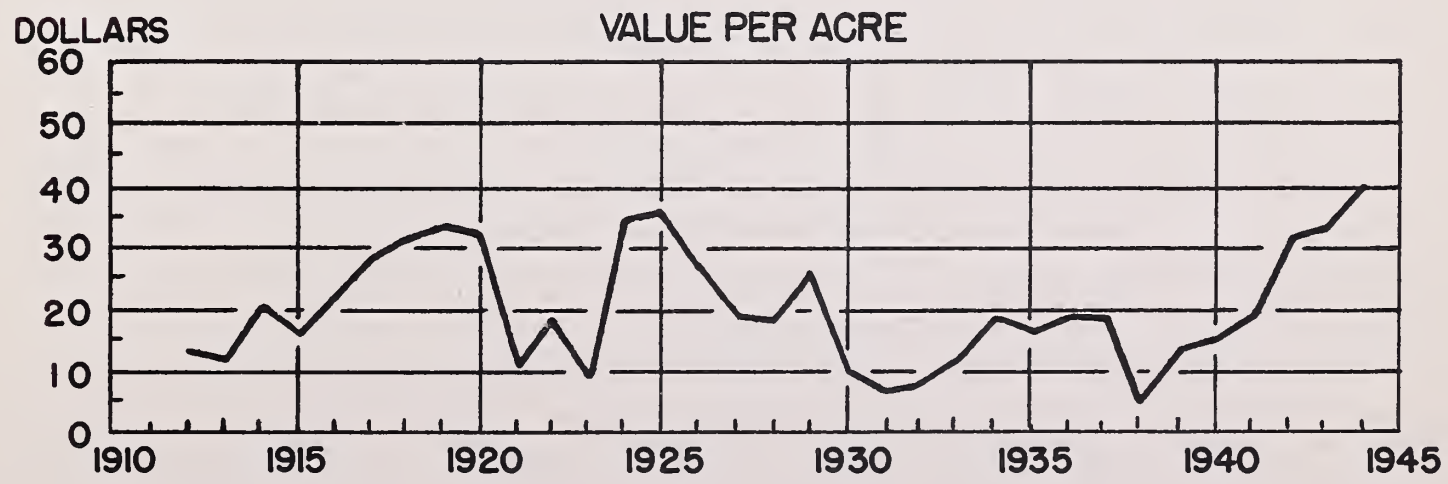

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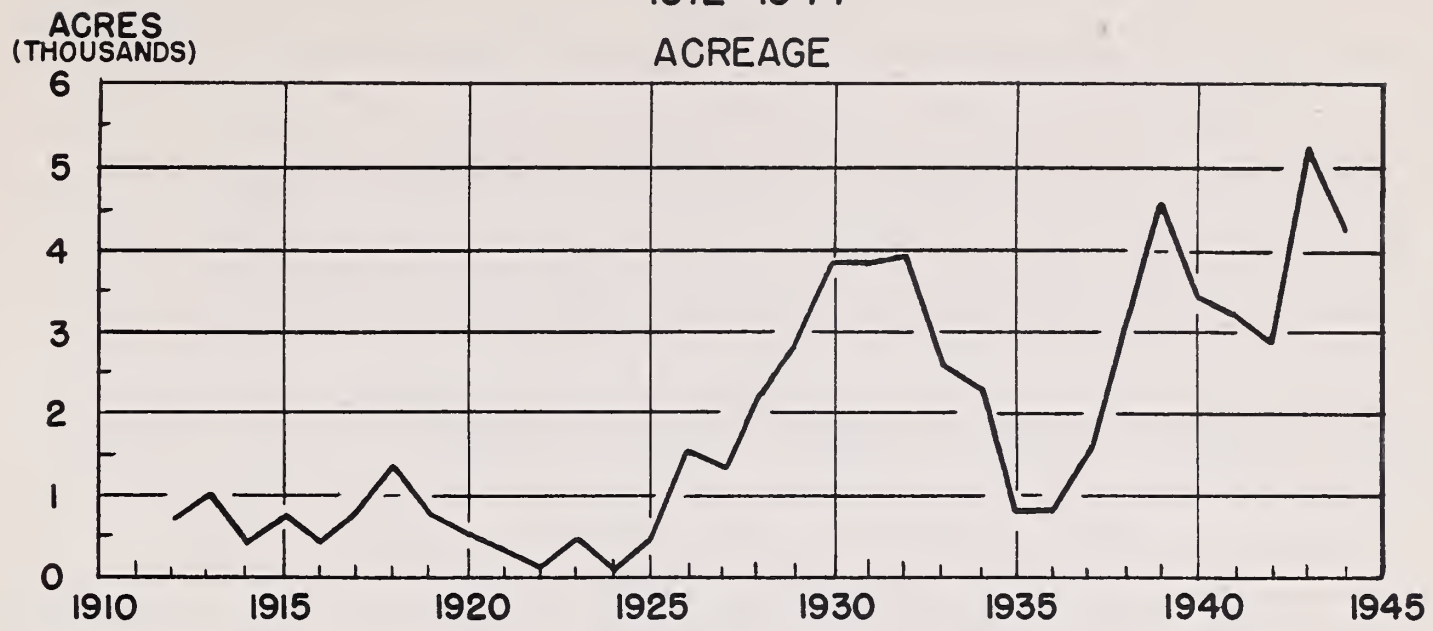
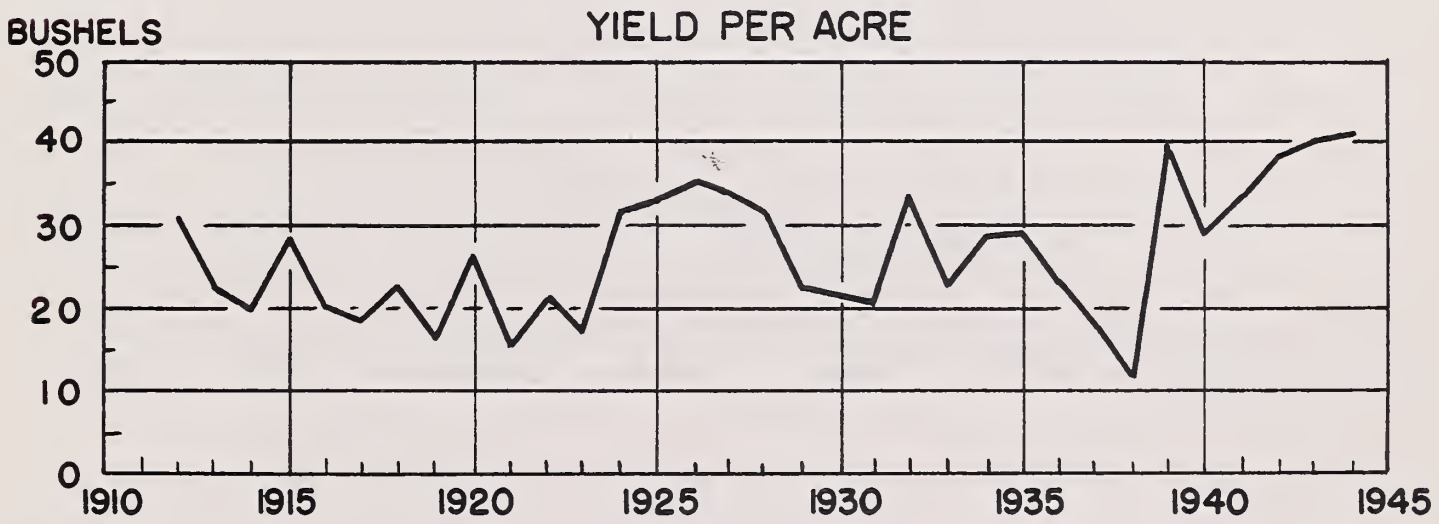
FIGURE 11.- BARLEY: ACREAGE, YIELD AND VALUE
LOWER YELLOWSTONE IRRIGATION PROJECT
1912-1944





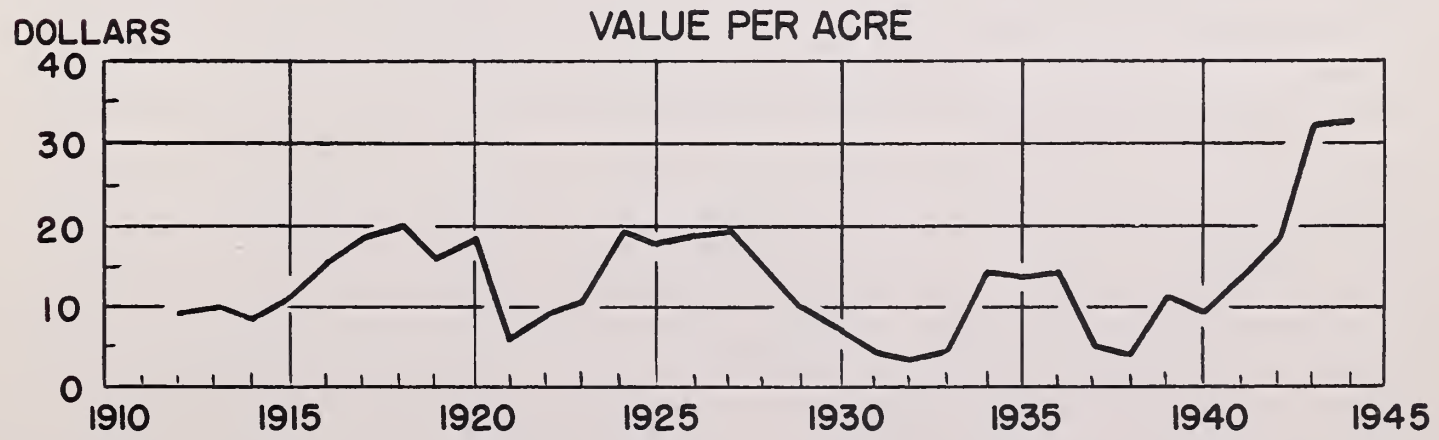


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FIGURE 12.- CORN: ACREAGE, YIELD AND VALUE
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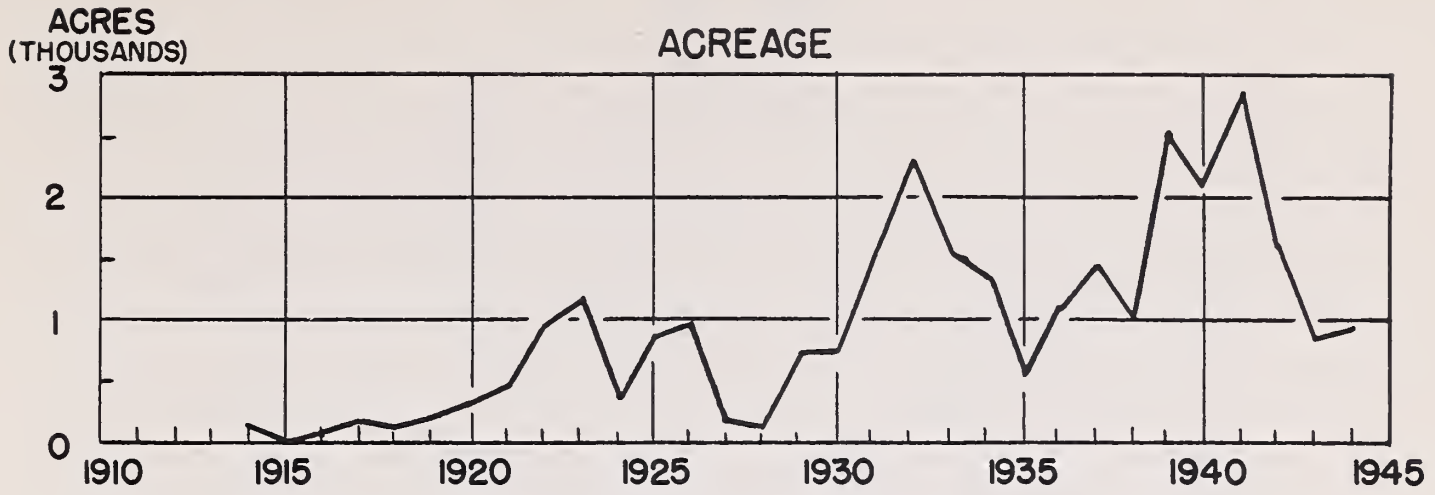
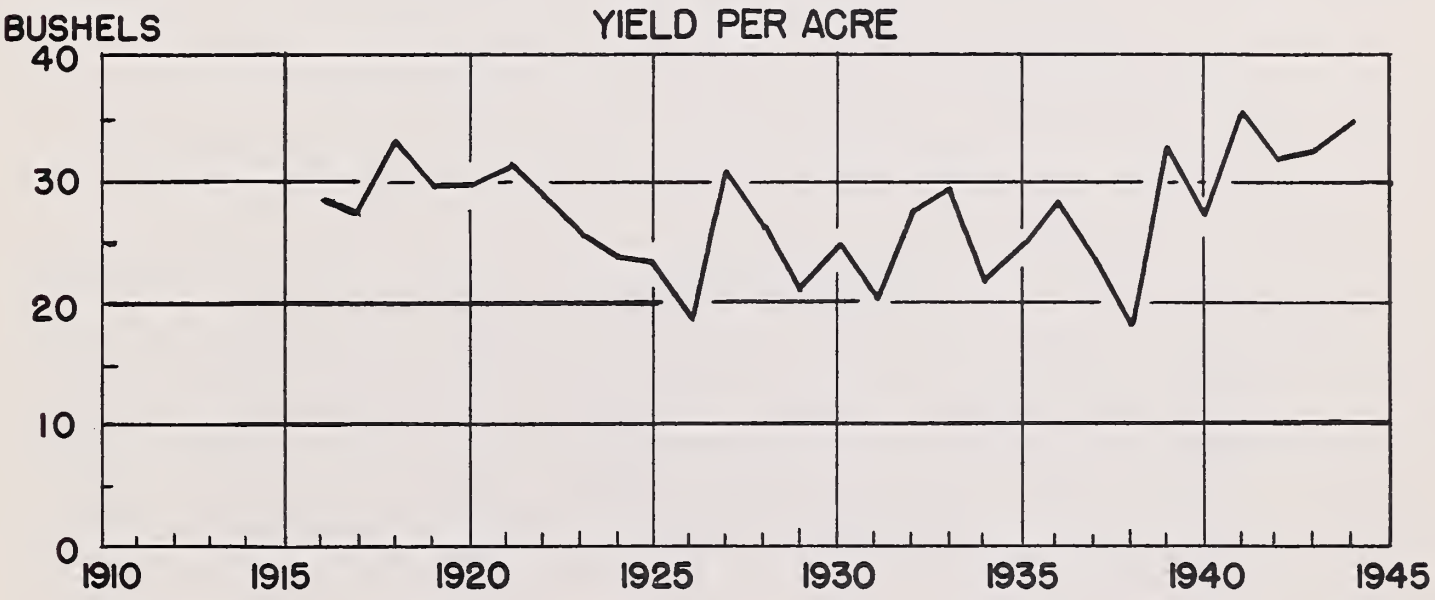
1914-1944





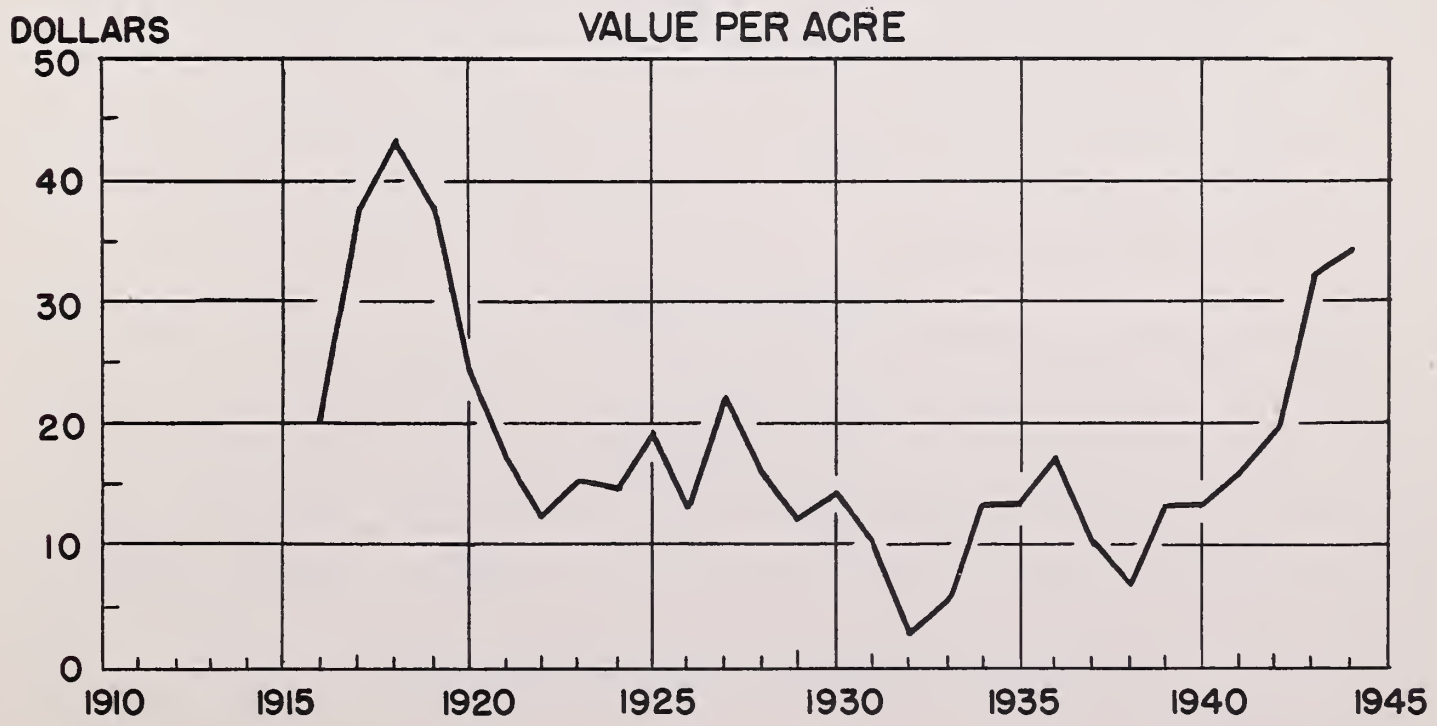


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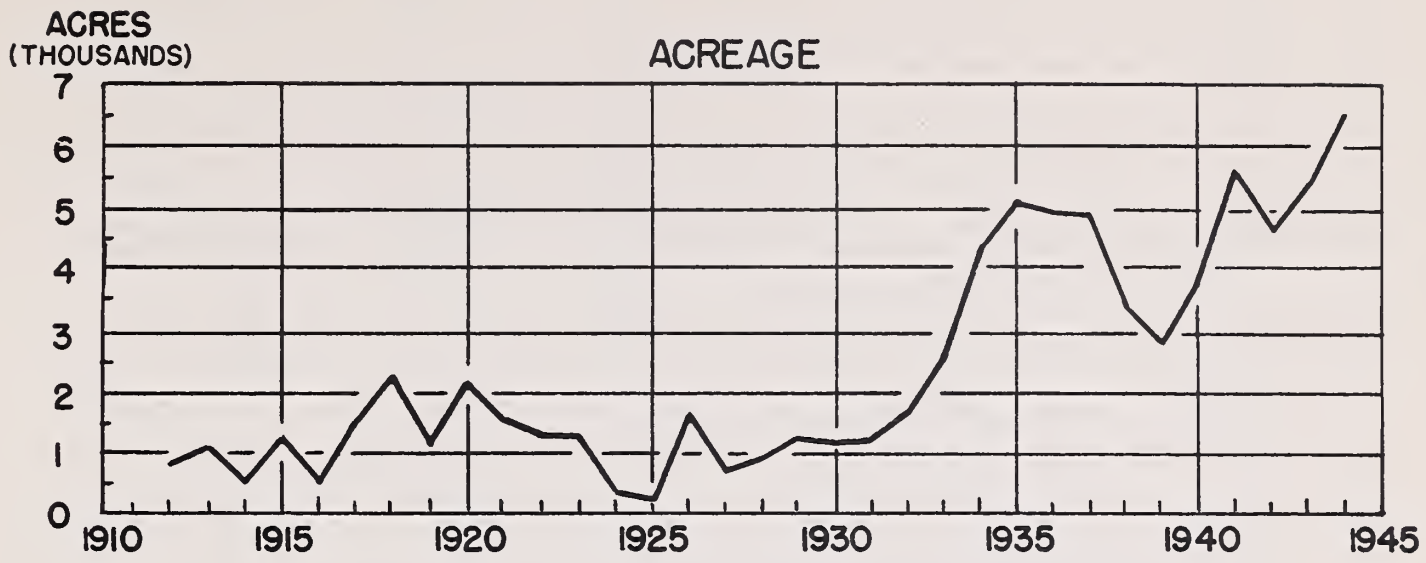
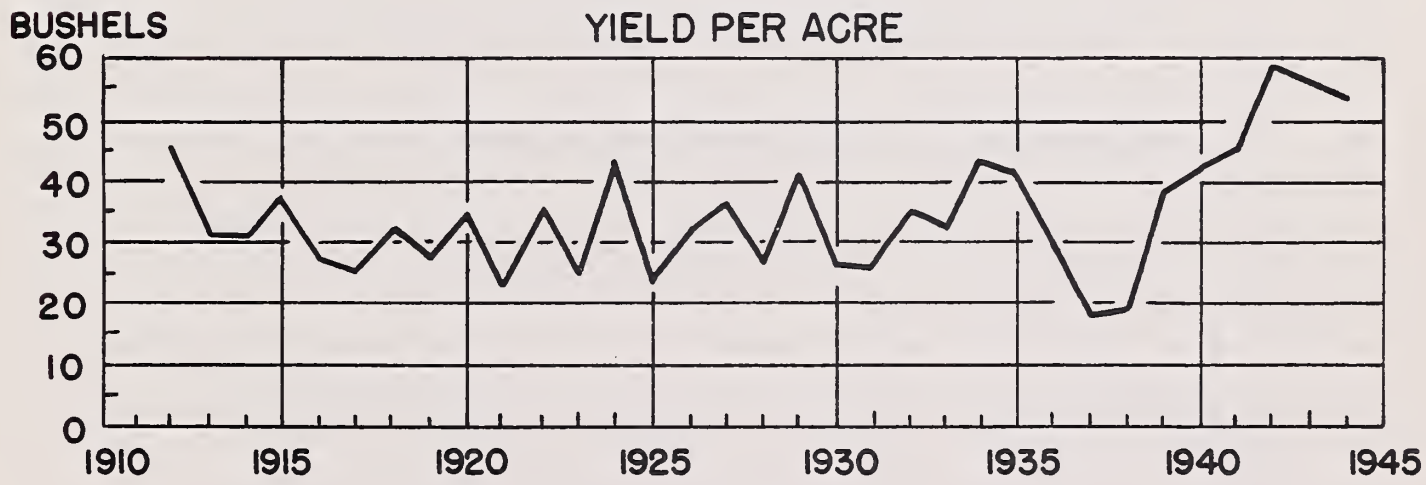
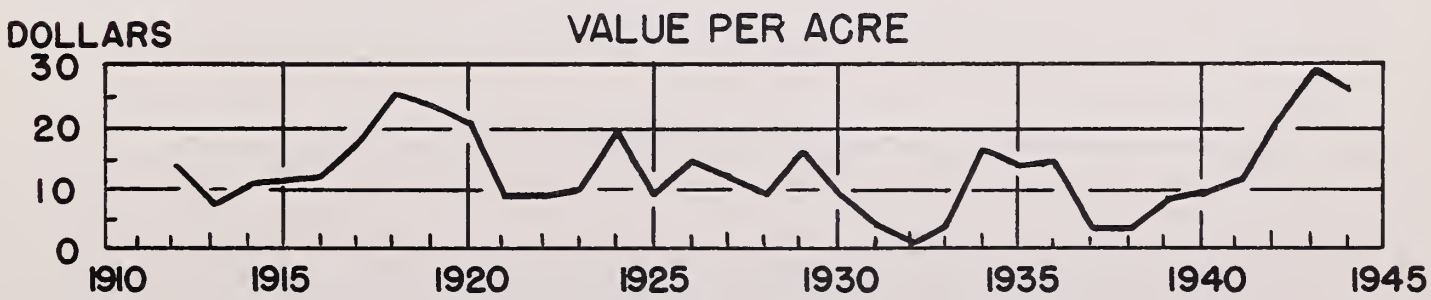
FIGURE 13.- OATS: ACREAGE, YIELD AND VALUE
LOWER YELLOWSTONE IRRIGATION PROJECT
1912-1944







DATA FROM BUREAU OF RECLAMATION

Table 1.- Use made of the irrigable acreage,
Lower Yellowstone Irrigation Project, 1912-44

Year	Irrigable acreage 1/																	
	Total		Irrigated						Not irrigated									
			Total		Harvested 2/		Not harvested 3/		Total		Dry farmed 4/		Idle		Temporarily suspended 5/		Buildings, yards, roads	
	1,000 acres	Percent	1,000 acres	Percent	1,000 acres	Percent	Acres	Percent	1,000 acres	Percent	1,000 acres	Percent	Acres	Percent	1,000 acres	Percent	1,000 Acres	Percent
1944	57	100	48	83	47	82	800	1	10	17	0	0	0	0	6	11	3	6
1943	57	100	47	82	46	81	600	1	11	18	0	0	600	1	7	12	3	5
1942	57	100	46	80	45	79	500	1	11	20	0	0	700	1	8	14	3	5
1941	57	100	46	80	45	79	500	1	11	20	0	0	0	0	8	14	3	6
1940	57	100	46	80	45	79	700	1	11	20	0	0	0	0	6/ 8	14	6/ 3	6
1939	57	100	44	77	43	76	600	1	13	23	6/ 0	0	6/ 0	0	6/ 10	18	6/ 3	5
1938	57	100	44	76	43	75	600	1	13	24	6/ 0	0	6/ 0	0	6/ 11	18	6/ 3	6
1937	58	100	44	76	44	76	100	0	14	24	0	0	0	0	11	18	3	6
1936	58	100	43	74	42	72	4/1,100	2	15	26	0	0	0	0	9	16	6	10
1935	58	100	39	66	39	65	0	0	20	34	1	1						
1934	58	100	36	62	36	62	0	0	22	38	0	0						
1933	58	100	34	58	34	58	0	0	24	42	3	5						
1932	58	100	31	54	31	54	0	0	27	46	6	10	(Data not available prior to 1936)					
1931	58	100	31	54	31	54	4/ 40	0	27	46	1	2						
1930	58	100	29	49	29	49	0	0	30	51	6	11						
1929	58	100	24	41	24	41	0	0	34	59	12	21						
1928	58	100	20	34	20	34	10	0	38	66	17	29						
1927	58	100	16	27	16	27	0	0	43	73	18	31						
1926	58	100	23	40	23	40	4/ 70	0	35	60	10	16						
1925	58	100	18	31	18	31	0	0	40	69	13	22						
1924	58	100	14	24	14	24	0	0	44	76	19	32						
1923	49	100	18	37	18	36	4/ 70	1	31	63	15	30						
1922	40	100	16	39	15	38	4/ 200	1	25	61	13	33						
1921	40	100	20	50	20	50	0	0	20	50	10	24						
1920	42	100	19	45	19	45	0	0	23	55	8	19						
1919	42	100	21	51	21	51	4/ 10	0	21	49	5	13						
1918	42	100	21	50	21	50	4/ 70	0	21	50	5	13						
1917	42	100	16	37	16	37	4/ 80	0	26	63	9	21						
1916	42	100	6	14	6	14	0	0	36	86	17	39						
1915	42	100	13	30	12	28	4/ 700	2	30	70	10	25						
1914	36	100	6	16	6	16	4/ 100	0	31	84	17	47						
1913	37	100	8	21	7	20	4/ 300	1	29	79	13	35						
1912	38	100	5	13	4	10	4/1,300	3	33	87	14	36						

1/ Acreage for which Bureau of Reclamation was prepared to supply water.
2/ Harvested crops plus pasture. Irrigated temporarily suspended areas include: 1,069 acres in 1944; 700 acres in 1943; 797 acres in 1942; and 1,048 acres in 1941. For the years 1909 to 1940 inclusive the amount of temporarily suspended irrigated land was not reported.
3/ Land from which no crop was harvested such as fallow and hail-damaged crop.
4/ Not included in net area in cultivation.
5/ Temporarily suspended from the acreage upon which water charges are levied. Temporarily suspended lands not irrigated sometimes are used for crops and pasture.
6/ Estimated.

Table 2.- Use made of the net area in cultivation,
Lower Yellowstone Irrigation Project, 1912-44

Year	Net area in cultivation 1/									
	Total		Cereal grain		Hay & forage		Sugar beets		Other crops 2/	
	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
1944	46,621	100	15,844	34	14,422	31	14,009	30	2,346	5
1943	45,975	100	14,912	32	14,124	31	11,843	26	5,096	11
1942	45,026	100	12,339	27	14,967	33	15,284	34	2,436	6
1941	44,872	100	15,874	35	13,443	30	12,306	27	3,249	8
1940	46,178	100	13,957	30	13,919	30	15,868	35	2,434	5
1939	43,932	100	14,422	33	14,938	34	12,271	28	2,301	5
1938	43,723	100	13,193	30	14,905	34	13,049	30	2,576	6
1937	44,251	100	13,291	30	16,542	37	12,331	28	2,087	5
1936	42,042	100	11,728	28	16,559	39	12,275	29	1,480	4
1935	38,638	100	11,789	31	11,560	30	13,536	35	1,753	4
1934	36,348	100	10,488	29	11,670	32	12,081	33	2,109	6
1933	33,902	100	9,265	27	11,142	33	11,544	34	1,951	6
1932	31,235	100	10,151	32	10,282	33	9,095	29	1,707	6
1931	31,194	100	7,476	24	10,602	34	10,002	32	3,114	10
1930	28,681	100	7,834	27	8,836	31	7,402	26	4,609	16
1929	23,943	100	8,337	35	7,972	33	5,911	25	1,723	7
1928	19,780	100	7,402	37	6,440	33	4,987	25	951	5
1927	15,629	100	5,366	34	5,415	35	3,439	22	1,409	9
1926	23,256	100	8,222	35	8,446	36	5,180	22	1,408	7
1925	18,276	100	2,559	14	6,639	36	6,952	38	2,126	12
1924	14,030	100	937	7	5,998	43	6,590	47	505	3
1923	17,780	100	5,835	33	7,768	44	3,110	17	1,067	6
1922	15,400	100	5,701	37	7,557	49	1,107	7	1,035	7
1921	19,980	100	7,428	37	10,336	52	1,533	8	683	3
1920	19,120	100	8,991	47	8,387	44	658	3	1,084	6
1919	21,289	100	8,955	43	11,042	52	380	2	912	3
1918	21,000	100	10,171	48	8,624	41	500	2	1,705	9
1917	15,659	100	5,471	35	8,115	52	307	2	1,766	11
1916	6,020	100	2,313	38	3,512	58	0	0	195	4
1915	11,990	100	6,588	55	4,965	41	0	0	437	4
1914	5,621	100	2,160	38	3,082	55	0	0	379	7
1913	7,410	100	5,323	72	1,654	22	0	0	433	6
1912	3,815	100	2,527	66	1,038	27	0	0	250	7
Average 1912-44	26,746	100	8,692	33	9,542	36	6,774	25	1,737	6
Average 1930-44	40,175	100	12,171	30	13,194	33	12,193	30	2,617	7

1/ Net area in cultivation includes all land from which crops were harvested, fallow or fall plowed land, and land irrigated for pasture. It may include cropland that was not irrigated during the crop year.
2/ Such as seed, gardens, truck, fruit.

Table 3.- Gross value of cereal grain, hay and forage, sugar beets and other crops, Lower Yellowstone Irrigation Project, 1912-44 1/

Year	All crops		Cereal grain		Hay & forage		Sugar beets		Other crops 2/	
	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent
1944	2,923	100	504	17	291	10	1,999	69	129	4
1943	2,742	100	480	18	304	11	1,731	63	227	8
1942	2,292	100	282	12	244	11	1,638	71	128	6
1941	1,861	100	234	13	147	8	1,385	74	94	5
1940	1,822	100	164	9	147	8	1,423	78	89	5
1939	1,472	100	169	12	119	8	1,092	74	93	6
1938	1,304	100	60	4	101	8	1,055	81	88	7
1937	1,322	100	140	11	215	16	871	66	97	7
1936	1,601	100	192	12	317	20	981	61	111	7
1935	1,548	100	173	11	164	11	1,141	74	69	4
1934	1,191	100	170	14	209	18	741	62	71	6
1933	1,000	100	61	6	42	4	840	84	57	6
1932	669	100	42	6	74	11	533	80	21	3
1931	856	100	43	5	109	13	658	77	46	5
1930	958	100	70	7	127	13	643	67	118	13
1929	780	100	142	18	131	17	405	52	103	13
1928	499	100	117	24	67	13	277	55	39	8
1927	422	100	93	22	65	15	239	57	25	6
1926	743	100	176	24	201	27	302	41	64	8
1925	642	100	60	10	129	20	361	56	91	14
1924	548	100	18	3	112	21	384	70	35	6
1923	507	100	62	12	109	22	277	55	59	11
1922	334	100	85	25	128	39	72	21	49	15
1921	304	100	83	27	103	34	75	25	44	14
1920	585	100	255	44	191	33	86	14	53	9
1919	869	100	267	31	491	56	35	4	76	9
1918	669	100	291	44	261	39	31	4	86	13
1917	460	100	132	29	237	52	16	3	75	16
1916	125	100	43	35	68	54	0	0	14	11
1915	194	100	96	49	84	44	0	0	14	7
1914	97	100	33	34	48	50	0	0	16	16
1913	102	100	59	58	33	32	0	0	10	10
1912	48	100	31	65	13	27	0	0	4	8
Average 1912-44	954	100	146	16	154	16	584	61	69	7
Average 1930-44	1,571	100	186	12	174	11	1,115	71	96	6

1/ Government conservation program payments were divided between "Sugar beets" and "Other crops". The value of sugar beet tops is included with "Hay and forage" crops. Agricultural conservation and factory bonuses were credited to the year in which payments were received.

2/ Such as seed, gardens, truck, fruit. Value also includes some agricultural conservation payments.

Table 4.- Gross value per acre of cereal grain, hay and forage, sugar beets and other crops, Lower Yellowstone Irrigation Project, 1912-44 1/

Year	All crops	Cereal grains	Hay & forage	Sugar beets	Other crops
	Dollars	Dollars	Dollars	Dollars	Dollars
1944	63	32	20	143	55
1943	60	32	22	146	45
1942	51	23	16	107	52
1941	41	15	11	113	29
1940	39	12	11	90	36
1939	34	12	8	89	40
1938	30	5	7	81	34
1937	30	11	13	71	46
1936	38	16	19	80	75
1935	40	15	14	84	39
1934	33	16	18	61	34
1933	30	7	4	73	29
1932	21	4	7	59	12
1931	27	6	10	66	15
1930	33	9	14	87	26
1929	33	17	16	69	60
1928	25	16	10	58	41
1927	27	17	12	69	18
1926	32	19	24	58	45
1925	35	24	19	52	43
1924	39	19	19	58	68
1923	28	11	14	89	55
1922	22	11	17	65	47
1921	15	11	10	49	64
1920	31	28	23	130	49
1919	41	30	44	92	83
1918	32	29	30	62	50
1917	29	24	29	52	42
1916	21	19	19	0	73
1915	16	15	17	0	32
1914	17	15	16	0	42
1913	14	11	20	0	23
1912	13	12	12	0	16
Average					
1930-44	36	17	16	86	40
1912-44	39	15	13	91	37

1/ See footnotes 1 and 2, table 3.

Table 5.- Sugar beets: Acreage, production and value, Lower Yellowstone Irrigation Project, 1917-44

Year	Acreage	Production		Value		
		Total	Per acre	Per ton	Total	Per acre
	Acres	1,000 tons	Tons	Dollars	1,000 dollars	Dollars
1944	14,009	155	11.1	12.86	1,999	143
1943	11,843	119	10.0	14.56	1,731	146
1942	15,284	193	12.6	8.50	1,638	107
1941	12,306	145	11.8	9.53	1,385	113
1940	15,868	253	15.9	5.63	1,423	90
1939	12,271	175	14.3	6.23	1,092	89
1938	13,049	170	13.0	6.21	1,055	81
1937	12,331	151	12.3	5.75	871	71
1936	12,275	125	10.2	7.87	981	80
1935	13,536	158	11.7	7.22	1,141	84
1934	12,081	137	11.4	5.40	741	61
1933	11,544	151	13.0	5.58	840	73
1932	9,095	118	13.0	4.50	533	59
1931	10,002	110	11.0	6.00	658	66
1930	7,402	92	12.4	7.00	643	87
1929	5,911	58	9.8	7.00	405	69
1928	4,987	40	7.9	7.00	277	58
1927	3,439	34	9.9	7.00	239	69
1926	5,180	50	9.7	6.00	302	58
1925	6,952	60	8.7	6.00	361	52
1924	6,590	64	9.7	6.00	384	58
1923	3,110	33	10.5	8.48	277	89
1922	1,107	12	10.8	6.00	72	65
1921	1,533	13	8.3	5.85	75	49
1920	658	7	10.0	1/ 13.00	86	130
1919	380	4	9.2	10.00	35	92
1918	500	3	6.6	9.30	31	62
1917	307	2	8.0	6.50	16	52
Average 1917-44	8,020	94	11.7	7.33	689	86
Average 1930-44	12,193	150	12.3	7.43	1,115	91

1/ Includes $1.00 per ton for tops.

Table 5.- Sugar beets: Acreage, production and value, Lower Yellowstone Irrigation Project, 1917-44

Year	Acreage	Production		Value		
		Total	Per acre	Per ton	Total	Per acre
	Acres	1,000 tons	Tons	Dollars	1,000 dollars	Dollars
1944	14,009	155	11.1	12.86	1,999	143
1943	11,843	119	10.0	14.56	1,731	146
1942	15,284	193	12.6	8.50	1,638	107
1941	12,306	145	11.8	9.53	1,385	113
1940	15,868	253	15.9	5.63	1,423	90
1939	12,271	175	14.3	6.23	1,092	89
1938	13,049	170	13.0	6.21	1,055	81
1937	12,331	151	12.3	5.75	871	71
1936	12,275	125	10.2	7.87	981	80
1935	13,536	158	11.7	7.22	1,141	84
1934	12,081	137	11.4	5.40	741	61
1933	11,544	151	13.0	5.58	840	73
1932	9,095	118	13.0	4.50	533	59
1931	10,002	110	11.0	6.00	658	66
1930	7,402	92	12.4	7.00	643	87
1929	5,911	58	9.8	7.00	405	69
1928	4,987	40	7.9	7.00	277	58
1927	3,439	34	9.9	7.00	239	69
1926	5,180	50	9.7	6.00	302	58
1925	6,952	60	8.7	6.00	361	52
1924	6,590	64	9.7	6.00	384	58
1923	3,110	33	10.5	8.48	277	89
1922	1,107	12	10.8	6.00	72	65
1921	1,533	13	8.3	5.85	75	49
1920	658	7	10.0	1/ 13.00	86	130
1919	380	4	9.2	10.00	35	92
1918	500	3	6.6	9.30	31	62
1917	307	2	8.0	6.50	16	52
Average 1917-44	8,020	94	11.7	7.33	689	86
Average 1930-44	12,193	150	12.3	7.43	1,115	91

1/ Includes $1.00 per ton for tops.

Table 6.- Alfalfa hay: Acreage, production and value, Lower Yellowstone Irrigation Project, 1912-44

Year	Acreage	Production		Value		
		Total	Per acre	Per ton	Total	Per acre
	Acres	Tons	Tons	Dollars	1,000 dollars	Dollars
1944	9,982	20,521	2.1	11.00	226	23
1943	9,606	19,986	2.1	11.00	220	23
1942	10,199	22,488	2.2	7.50	169	17
1941	7,883	19,059	2.4	5.00	95	12
1940	7,804	16,386	2.1	5.00	82	11
1939	6,552	11,661	1.8	4.00	47	7
1938	6,614	8,802	1.3	4.50	40	6
1937	6,850	13,485	2.0	8.50	115	17
1936	6,362	14,769	2.4	12.00	180	28
1935	4,959	10,410	2.1	8.00	83	17
1934	3,818	8,566	2.2	12.00	103	27
1933	4,692	6,035	1.3	4.00	24	5
1932	6,753	13,140	1.9	4.00	53	8
1931	6,215	11,973	1.9	6.00	72	12
1930	5,290	10,017	1.9	9.00	90	19
1929	5,352	10,232	1.9	10.00	102	19
1928	4,907	7,849	1.6	6.00	47	10
1927	4,575	8,109	1.8	6.00	49	11
1926	6,352	15,204	2.4	10.00	152	24
1925	5,292	11,642	2.2	7.50	87	17
1924	4,275	11,210	2.6	7.00	78	18
1923	6,356	11,569	1.8	8.00	93	15
1922	6,463	12,560	1.9	7.00	88	14
1921	7,401	13,338	1.8	6.50	87	12
1920	7,030	14,020	2.0	12.00	168	24
1919	9,696	21,550	2.2	21.00	453	47
1918	6,920	14,630	2.1	16.00	234	34
1917	6,505	14,062	2.2	15.30	215	33
1916	3,208	7,544	2.4	8.55	65	20
1915	4,404	10,283	2.3	7.74	80	18
1914	2,884	6,482	2.5	7.20	47	16
1913	1,407	3,231	2.3	9.74	31	22
1912	972	2,009	2.1	6.00	12	12
Average 1912-44	5,987	12,207	2.0	9.15	112	19
Average 1930-44	6,905	13,819	2.0	77.70	106	15

Table 7.- Wheat: Acreage, production and value,
Lower Yellowstone Irrigation Project, 1912-44

Year	Acreage	Production		Value		
		Total	Per acre	Per bushel	Total	Per acre
	Acres	1,000 bushels	Bushels	Dollars	1,000 dollars	Dollars
1944	4,029	123	30.6	1.30	160	40
1943	3,275	103	31.4	1.17	120	33
1942	3,215	102	31.9	1.00	102	32
1941	4,163	92	22.0	.84	77	19
1940	4,634	120	25.9	.56	67	15
1939	4,281	109	25.4	.20	54	13
1938	5,381	66	12.3	.40	27	5
1937	5,260	99	18.9	.97	96	18
1936	4,256	69	16.1	1.20	82	19
1935	4,702	94	20.0	.80	75	16
1934	2,355	53	22.3	.80	42	18
1933	2,252	44	19.5	.60	26	12
1932	1,955	49	24.9	.34	17	8
1931	878	13	14.8	.50	7	7
1930	2,042	41	20.0	.50	20	10
1929	3,280	82	25.0	1.00	82	25
1928	4,044	85	20.9	.85	72	18
1927	3,064	55	17.8	1.00	55	18
1926	4,136	91	21.9	1.25	113	27
1925	981	23	23.9	1.45	34	35
1924	90	2	25.0	1.35	3	34
1923	2,986	28	9.4	.95	27	9
1922	3,317	61	18.5	1.00	61	18
1921	5,100	58	11.4	1.00	58	11
1920	6,042	111	18.4	1.75	194	32
1919	6,335	87	13.7	2.40	208	33
1918	6,288	99	15.8	2.00	200	32
1917	2,963	42	14.1	1.98	83	28
1916	1,251	17	13.8	1.60	28	22
1915	4,518	82	18.2	.87	72	16
1914	1,071	21	20.0	1.00	21	20
1913	3,136	55	17.6	.70	39	12
1912	960	20	21.0	.62	13	13
Average 1912-44	3,401	67	19.6	1.06	71	21
Average 1930-44	3,512	78	22.3	.83	65	18

Table 8.- Barley: Acreage, production and value, Lower Yellowstone Irrigation Project, 1912-44

Year	Acreage	Production		Value		
		Total	Per acre	Per bushel	Total	Per acre
	Acres	1,000 bushels	Bushels	Dollars	1,000 dollars	Dollars
1944	4,296	177	41.2	.78	138	32
1943	5,259	213	40.5	.80	171	32
1942	2,820	107	38.0	.48	51	18
1941	3,241	109	33.6	.40	44	13
1940	3,372	99	29.5	.30	30	9
1939	4,586	180	39.2	.30	54	12
1938	3,119	38	12.1	.32	12	4
1937	1,613	28	17.6	.36	10	6
1936	1,331	31	23.0	.60	18	14
1935	1,326	38	28.7	.45	17	13
1934	2,295	65	28.3	.50	32	14
1933	2,686	60	22.4	.20	12	4
1932	3,945	133	33.7	.10	13	3
1931	3,813	77	20.2	.20	15	4
1930	3,827	81	21.1	.35	28	7
1929	2,846	63	22.3	.45	29	10
1928	2,250	72	31.8	.48	34	15
1927	1,365	47	34.7	.54	26	19
1926	1,500	53	35.1	.50	26	18
1925	398	13	33.2	.50	7	17
1924	159	5	32.1	.60	3	19
1923	400	7	17.9	.60	4	11
1922	116	2	21.2	.44	1	9
1921	325	5	15.2	.40	2	6
1920	519	14	26.3	.70	10	18
1919	780	13	16.2	1.00	13	16
1918	1,321	30	22.5	.90	27	20
1917	798	15	18.4	1.00	15	18
1916	488	10	20.2	.79	8	16
1915	750	21	28.6	.43	9	12
1914	407	8	20.0	.43	3	8
1913	1,027	23	22.5	.46	11	10
1912	752	24	31.4	.30	7	9
Average 1912-44	1,931	56	29.2	.47	27	14
Average 1930-44	3,169	96	30.2	.45	43	14

Table 9.- Corn: Acreage, production and value
Lower Yellowstone Irrigation Project, 1914-44

Year	Acreage	Production		Value		
		Total	Per acre	Per bushel	Total	Per acre
	Acres	Bushels	Bushels	Dollars	1,000 dollars	Dollars
1944	908	31,697	34.9	.96	30	34
1943	852	27,364	32.1	1.00	27	32
1942	1,684	53,652	31.9	.60	32	19
1941	2,896	102,049	35.2	.45	46	16
1940	2,103	57,662	27.4	.47	27	13
1939	2,582	83,147	32.2	.40	33	13
1938	1,047	19,547	18.7	.36	7	7
1937	1,486	34,620	23.3	.45	16	10
1936	1,120	31,372	28.0	.60	19	17
1935	570	14,259	25.0	.50	7	13
1934	1,317	29,427	22.3	.60	18	13
1933	1,540	45,814	29.7	.20	9	6
1932	2,373	65,315	27.5	.12	8	3
1931	1,522	31,351	20.6	.50	16	10
1930	749	18,349	24.5	.56	10	14
1929	748	15,894	21.3	.56	9	12
1928	121	3,171	26.2	.60	2	16
1927	175	5,402	30.9	.70	4	22
1926	961	17,968	18.7	.70	13	13
1925	865	20,211	23.4	.80	16	19
1924	370	8,845	23.9	.60	5	14
1923	1,196	30,573	25.6	.60	18	15
1922	972	27,980	28.8	.40	11	12
1921	490	15,199	31.0	.55	8	17
1920	289	8,523	29.5	.80	7	24
1919	174	5,116	29.4	1.30	7	38
1918	136	4,470	32.9	1.30	6	43
1917	156	4,252	27.3	1.40	6	38
1916	46	1,300	28.3	.70	1	20
1915	0	0	.0	.00	0	0
1914	107	3,512	33.0	.72	3	24
Average 1914-44	953	26,388	27.7	.51	14	14
Average 1930-44	1,517	43,042	28.4	.47	20	13

Table 10.- Oats: Acreage, production and value,
Lower Yellowstone Irrigation Project, 1912-44

Year	Acreage	Production		Value		
		Total	Per acre	Per bushel	Total	Per acre
	Acres	1,000 bushels	Bushels	Dollars	1,000 Dollars	Dollars
1944	6,536	354	54.2	.49	174	27
1943	5,472	303	55.3	.53	160	29
1942	4,606	267	58.0	.36	96	21
1941	5,574	251	45.1	.27	68	12
1940	3,756	156	41.6	.25	39	10
1939	2,941	113	38.5	.24	27	9
1938	3,447	68	19.8	.20	14	4
1937	4,932	91	18.4	.20	18	4
1936	5,021	152	30.2	.48	73	15
1935	5,135	210	40.9	.35	73	14
1934	4,420	192	43.3	.40	77	17
1933	2,689	88	32.8	.15	13	5
1932	1,725	60	34.8	.06	4	2
1931	1,193	32	26.8	.15	5	4
1930	1,136	31	27.0	.35	11	9
1929	1,285	52	40.5	.40	21	16
1928	987	27	27.1	.32	9	9
1927	742	27	36.2	.32	9	12
1926	1,590	51	32.3	.45	23	15
1925	269	6	23.6	.40	3	9
1924	316	14	43.0	.45	6	19
1923	1,253	31	25.0	.40	13	10
1922	1,296	46	35.3	.25	11	9
1921	1,513	35	23.3	.40	14	9
1920	2,141	74	34.5	.60	44	21
1919	1,666	47	28.0	.85	40	24
1918	2,247	72	32.1	.80	58	26
1917	1,526	40	25.9	.70	28	18
1916	528	15	27.7	.45	7	12
1915	1,320	50	37.7	.29	15	11
1914	575	18	31.0	.34	6	11
1913	1,160	36	31.0	.26	9	8
1912	815	37	45.2	.32	12	14
Average 1912-44	2,419	92	38.1	.39	36	15
Average 1930-44	3,906	158	42.1	.34	57	15